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| APPLICATION NO.  | FILING DATE      | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO |
|--|------------------|----------------------|-------------------------|-----------------|
| 10/040,450   | 01/09/2002       | Hiroshi Uchida       | 000362A                 | 2853            |
| 38834 7.   | 590 04/07/2004   |                      | EXAMINER                |                 |
| WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP<br>1250 CONNECTICUT AVENUE, NW |                  |                      | MUROMOTO JR, ROBERT H   |                 |
| SUITE 700  | THEOT AVENUE, NW |                      | ART UNIT                | PAPER NUMBER    |
| WASHINGTO  | I, DC 20036      |                      | 3765                    |                 |
|  |                  |                      | DATE MAILED: 04/07/2004 | 1               |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application No.   | Applicant(s)   | <del>- V. (</del> |
|---|---|--|-------------------|
| Office Action Comments  | 10/040,450  | UCHIDA ET AL.  |                   |
| Office Action Summary   | Examiner  | Art Unit   |                   |
|   | Robert H Muromoto, Jr.  | 3765   |                   |
| The MAILING DATE of this communication app<br>Period for Reply  | pears on the cover sheet with the   | e correspondence address   |                   |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply by within the statutory minimum of thirty (30) will apply and will expire SIX (6) MONTHS for cause the application to become ABAND | e timely filed  days will be considered timely.  rom the mailing date of this communication  DNED (35 U.S.C. § 133). | n.                |
| Status  |   |  |                   |
| 1) Responsive to communication(s) filed on 26 Fe  | ebruary 2004.   |  |                   |
| , — , — , —   | action is non-final.  |  |                   |
| 3) Since this application is in condition for allowar   |   |  | ;                 |
| closed in accordance with the practice under E  | x parte Quayle, 1935 C.D. 11,   | 453 O.G. 213.  |                   |
| Disposition of Claims   |   |  |                   |
| 4)⊠ Claim(s) <u>3 and 6</u> is/are pending in the applicati   | on.   |  |                   |
| 4a) Of the above claim(s) is/are withdraw   |   |  |                   |
| 5) Claim(s) is/are allowed.   |   |  |                   |
| 6)⊠ Claim(s) <u>3 and 6</u> is/are rejected.  |   |  |                   |
| 7) Claim(s) is/are objected to.   |   |  |                   |
| 8) Claim(s) are subject to restriction and/or   | election requirement.   |  |                   |
| Application Papers  | •   |  |                   |
| 9)☐ The specification is objected to by the Examiner  | •   |  |                   |
| 10)☐ The drawing(s) filed on is/are: a)☐ acce   |   | e Examiner.  |                   |
| Applicant may not request that any objection to the o   | •   |  |                   |
| Replacement drawing sheet(s) including the correction   |   |  | l).               |
| 11)☐ The oath or declaration is objected to by the Exa  | aminer. Note the attached Offi  | ce Action or form PTO-152.   |                   |
| Priority under 35 U.S.C. § 119  |   |  |                   |
| 12)⊠ Acknowledgment is made of a claim for foreign <sub>l</sub>   | priority under 35 H.S.C. & 110  | (a) (d) or (f)   |                   |
| a)⊠ All b)□ Some * c)□ None of:   | priority under 55 0.5.0. § 115  | (a)-(u) or (r).  |                   |
| 1. Certified copies of the priority documents   | have been received  | •  |                   |
| 2. Certified copies of the priority documents   |   | ation No. 09/571 320   |                   |
| 3. Copies of the certified copies of the priori   |   |  |                   |
| application from the International Bureau   |   | · · · · · · · · · · · · · · · · · · ·  |                   |
| * See the attached detailed Office action for a list of   |   | ved.   |                   |
| •   | ·   |  |                   |
|   |   |  |                   |
| Attachment(s)   |   |  |                   |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 4) [] Interview Summa<br>Paper No(s)/Mail   |  |                   |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date  | _   | Patent Application (PTO-152)   |                   |

U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04) Application/Control Number: 10/040,450

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### **DETAILED ACTION**

## **Priority**

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the parent case of this application.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller et al. '663 in view of Calamito.

Miller teaches a woven multi-layer angle interlock (3-D, 5 axial) fabric. Referring to figs. 3 and 4, Miller clearly shows a divisibly woven section, that is cut in the longitudinal direction along a center line. The flaps 74 and 76, of the fabric can be bent to virtually any orientation desired relative to the remainder of the fabric. When bent to an angle of approximately 90 degrees relative to the remainder of the fabric as shown in Fig. 4 and then stiffened (I-beam manufacture), the flaps 74, 76, are particularly useful in preventing flexure of the fabric along the length (col. 8, lines 1-9).

As for the recitation that there be "at least two" divisible sections, without any recitation as to the criticality or unexpected results from this limitation, the examiner holds that one of ordinary skill in the art could determine through routine experimentation the ideal number of divisible sections needed for a given application.

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Additionally, Calamito teaches a multi-layer angle interlock fabric that uses a plurality of divisibly woven sections, which are used to form complex shapes for the production of structural composites.

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to use more than one divisibly woven section in the fabric of Miller to aid in the manufacture of I-shaped structural members.

## Response to Arguments

Applicant's arguments with respect to claims 3 and 6 have been considered but are most in view of the new ground(s) of rejection.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert H Muromoto, Jr. whose telephone number is 703-306-5503. The examiner can normally be reached on 8-530, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Calvert can be reached on 703-305-1025. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bhm March 30, 2004

JOHN J. CALVERT
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700